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Monthly Statistical Report

Prepared by the Finance, Accounting, and Statistics Department

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JANUARY 1992

SUMMARY

Total deliveries rose 1.9 percent in January, their second year-to-year increase in a row. This was not much of an achievement, however, since the growth was against figures of the first quarter of 1991—the weakest period for petroleum deliveries of the past five years, once normal seasonal variation is taken into account. Thus, January data provide little evidence of any recovery in deliveries since mid-1991.

Deliveries of individual products were up year to year as well in January, but again the underlying story behind the figures was mixed at best. Gasoline deliveries rose 2.7 percent from a year ago, though recent month-to-month growth in travel has been modest enough to suggest no more than a flat trend in gasoline consumption. Distillate deliveries inched up a marginal 0.3 percent, with an apparent modest strengthening in transportation usage. Again largely reflecting year-ago factors, kerosine jet fuel deliveries increased 3.3 percent. And residual fuel oil deliveries, up 6 percent from exceptionally weak levels a year ago, were otherwise still quite low compared to recent historical levels.

For domestic crude oil production, January's year-to-year dropoff of 2.1 percent or about 155 thousand B/D we believe understates the more recent rate of decline. We estimate that since mid-1991, when production's downturn began to become evident, the trend in domestic crude oil production has been falling at a rate of about 300 thousand B/D per year.

Meanwhile, for the sixth month in a row, January's total imports rose, year to year. The 4.3 percent, 305 thousand B/D increase came despite a nearly 12 percent, 210 thousand B/D drop in product imports versus a year ago and reflected a significantly smaller inventory drawdown. Imports of major products have dipped in the last two months as foreign prices have become less attractive vis-a-vis domestic sources.

Refinery activity, though up from a year ago, slackened more than usual from December's level in January, and the shift in emphasis from distillate to gasoline production was reflected in month-end inventories. For gasoline, builds over the past two months have increased stocks to 230 million barrels. Distillate stocks, however, dropped a greater-than-average 16 million barrels, and were approaching a more typical neighborhood after several months of being well above their historical level.

Crude stocks bounced back by 7 million barrels from December's lower-than-typical levels to 334 million barrels, also more in line with their usual range. Total stocks fell a substantial 27 million barrels, more than average for the month but within the volatile range of stock swings for January.

PRODUCT SUPPLIED [1]

Gasoline

NO GROWTH FOR GASOLINE. Gasoline deliveries rose 2.7 percent versus last January. However, the increase was less an indication of strengthening in recent months than of the weak deliveries in last year's first quarter.

The most recent data on travel suggest that the month-to-month trend in gasoline consumption continues to be flat at best. The growth trend in travel, on a month-to-month basis, we estimate has recently been around 1 to 2 percent at an annual rate—not enough, even with an apparent decline in the rate of improvement in fleet fuel efficiency, to provide any boost to consumption. That rate, at least as implied by comparing deliveries with travel data, has apparently slowed to 1 to 2 percent from an average of roughly 3 percent per year in recent prior years. The decline in efficiency improvement is likely related to the onset of the economic recession and dropoff in new car sales.

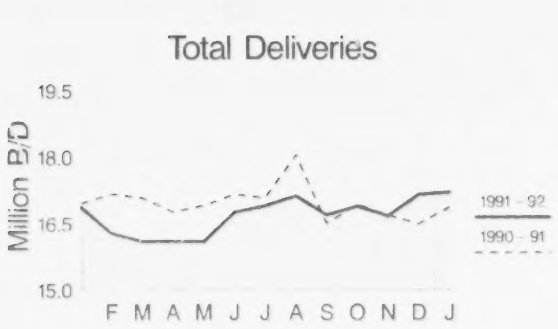
Gasoline prices continued to fall in January, down to an average for the month of about $1.08 per gallon for unleaded regular—the lowest inflation-adjusted price since late 1989, even without adjusting for the 5 cent Federal tax increase of December 1990 and various state tax increases. Year to year, they were down about 17 cents from crisis-related levels of last January—but even since June, they have fallen by a net 8 cents.

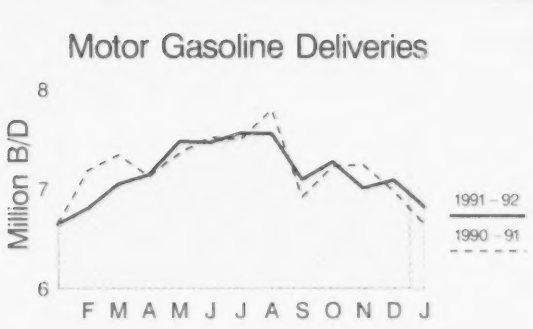
Distillates

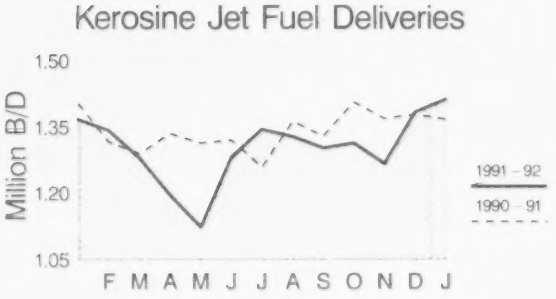
TRANSPORTATION USE INCHING UP. Despite mild weather, deliveries of distillate fuel oil rose 0.3 percent during January—a reflection, in part, of increases in transportation demand. At 3,365 million B/D, distillate deliveries reached their highest level since December 1989. Nonetheless, for the month, we estimate that

API ESTIMATES
JANUARY

	Million B/D	Percent Change
Total domestic deliveries	17.2	1.9
Crude production[2]	7.2	(2.1)
Total imports[2]	7.4	4.3
Stocks (million bbl)[3]	1,020	1.9







distillate consumption was down 30-40 thousand B/D from last January (although up by a comparable amount when normalized for weather).

Winter temperatures throughout much of the country were more moderate this January than last, deterring heating fuel consumption, particularly in the East and the Midwest. Nationwide, the nearly 10 percent year-to-year decline in heating degree days is estimated to have contributed to a drop in heating-related consumption of perhaps 70-80 thousand B/D. In transportation markets, however, indications are that both highway and rail traffic increased during the month, with highway truck tonnage up about 3 percent and rail ton-miles up about 5 percent. Such increases could account for year-to-year consumption increases in these sectors of perhaps 30 thousand B/D and 10 thousand B/D, respectively.

The 35-45 thousand B/D difference between changes in estimated consumption and changes in deliveries is believed to reflect contrasts in non-primary inventory patterns, perhaps in response to differing price patterns this year versus last. Spot distillate prices were generally increasing throughout January, finishing the month up 6-7 cents/gallon from the end of December. This would contrast with the pattern a year ago, when prices were both higher (thus making inventory carrying costs higher) and downward trending (thus discouraging near-term deliveries).

Kerosine Jet Fuel

MODEST RECOVERY CONTINUING. Deliveries of jet kerosine rose 3.3 percent, year to year, in January. Excepting December 1989's weather-related surge, deliveries for the month, at 1,412 thousand B/D, were at an all-time high. While growth in deliveries was slightly greater than the estimated growth in miles flown on commercial airlines, it is believed that price parity between jet fuel and distillate fuels during much of the month encouraged some incremental blending for heating and ground transportation needs.

After twelve consecutive months in which air travel declined on a year-to-year basis, we estimate that growth returned in January. However, much of the growth in January resulted from factors a year ago, when the start of the Persian Gulf War brought about a dramatic dropoff in air passenger travel and a diversion of military jet fuel demand overseas, and when Eastern Airlines ceased flight operations. Still, on a seasonally-adjusted basis, miles flown have been increasing moderately over the past several months, and early indications for January are that this trend has continued. Given this and the depressed level of travel a year ago, we estimate that miles flown grew, year to year, during the month by 1-2 percent, and were comparable to the levels of two years ago.

During the winter months, when commercial air travel is at or near its lows for the year, a considerable portion of jet fuel deliveries is diverted from aviation markets for use as blendstock with heating oil and diesel fuel. This blending ensures the firing properties of these distillates when temperatures drop, and is thus particularly important in the northern states. We estimate that about 10-15 percent, or 140-200 thousand B/D of jet fuel deliveries typically satisfy January weather-related blending needs.

However, when weather conditions become more severe or when price relationships merit, the amount of blending is believed to increase. In contrast to the 2-3 cents/gallon premium observed in the recent past versus distillate fuel, jet fuel prices moved into a parity position with distillate throughout much of the month, perhaps encouraging some incremental blending.

Residual Fuel Oil

TREND STILL WELL BELOW EARLIER LEVELS. Deliveries of residual fuel oil were up 6.0 percent, year to year, during January. However, this year-to-year comparison is deceptive in that deliveries last January, in the midst of crisis-inflated resid prices, were the lowest for any January in over 45 years. Perhaps more relevant is the fact that seasonally-adjusted deliveries, thanks to mild weather and low natural gas prices, have by our estimates fallen by about 15 percent over the past four months. Adding to this weakness of late was this month's opening of a major natural gas pipeline system from Canada into the traditionally resid-intensive Northeast.

The inherent variability in resid deliveries (due among other things, to changes in weather, prices, gas deliverability, and potentially large non-primary inventory shifts), makes deciphering a trend in underlying consumption complex. Still, beneath this month-to-month variability, it appears that consumption continues to trend down. By our estimates, over the last 2 years (net of the perturbations caused by the Persian Gulf Crisis), this downward trend has been in the 6-8 percent per year range.

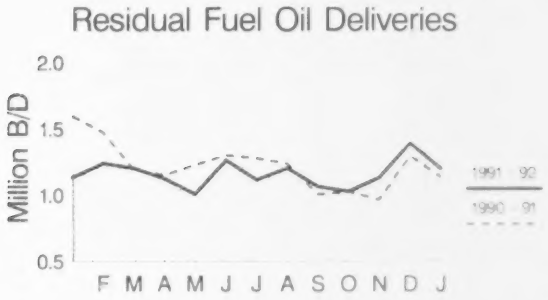
Already on the mild side a year ago, temperatures in New England and the Mid-Atlantic states moderated further in January, keeping power generation essentially unchanged from a year ago in the Northeast. Meanwhile, mild weather elsewhere in the country is believed to have freed up natural gas supplies, otherwise destined for home and commercial heating purposes, for consumption by utilities. While it is true that spot resid prices fell more dramatically, January to January, than natural gas prices—30 percent versus 15 percent—it is also true that at the end of January, gas prices were about as low as they have been in 13 years.

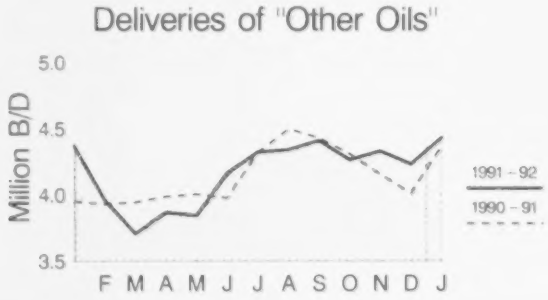
A key factor affecting the trend in resid consumption was this month's official opening of the Iroquois Gas Transmission System. The system, whose capacity is rated at 576 million cubic feet/day, brings gas supplies from Canada into New England, New York, and New Jersey. While presently thought to be operating at about 40 percent of this capacity, the pipeline system, once fully operational, could theoretically supplant as much as 95 thousand B/D of resid demand. During the winter, however, roughly two-thirds of pipeline capacity will be used to supply gas for space heating rather than for industrial and utility use. Thus, the potential impact on winter resid demand could be in the 30-35 thousand B/D range.

Other Oils

WARM WEATHER FREES UP PROPANE SUPPLIES. Deliveries of "other oils" were up 1.4 percent in January versus a year ago—roughly in line with the estimated trend of slight growth. However, with the sometimes-variable nature of "other oils" deliveries on a monthly basis, this may be more of a coincidence than anything else.

Propane demand in the chemical sector was likely boosted as it regained a price advantage over other petrochemical feedstocks. Stocks in major residential consuming regions had entered the heating season at levels close to or higher than year-ago levels, and with what has so far been the warmest winter in nearly ten years, some propane supplies have had to find other markets.





SUPPLY [1/]

Production

YEAR-TO-YEAR DROP UNDERSTATES DECLINE. Domestic crude oil production's decline for January—at 2.1 percent or about 155 thousand B/D below the year-ago level—does not fully convey the more-rapid rate of dropoff observed in the last half-year. Since the current decline did not begin until the middle of 1991, the most recent trend appears to be about double the rate indicated by year-to-year calculations.

Compared with last January, Alaskan output was down 3.2 percent or 60 thousand B/D while lower 48 production was down 1.7 percent or 95 thousand B/D. Versus June, January's Alaskan production was only about even—even though summer output tends to run lower than the rest of the year. We estimate the current decline rate in Alaska at close to 100 thousand B/D per year. For the lower 48, the decline since the middle of last year implies an annualized rate of decline of about 200 thousand B/D. In sum, with an estimated decline trend of about 300 thousand B/D per year, U.S. domestic crude oil production has been dropping at an annualized rate of about 4 percent.

Imports

PRODUCT IMPORTS SLIPPING OVER PAST TWO MONTHS. Total imports rose year to year for the sixth month in a row in January. The 4.3 percent, 305 thousand B/D increase came as an increase in crude oil imports more than offset a 210 thousand B/D decline in product imports, reflecting in part a smaller domestic stock draw this January than last.

Product imports, at 1.6 million B/D for the month, were the lowest since last March, the result of continued lackluster demand combined with less-attractive import prices versus domestic sources. Imports of finished gasoline fell about 25 thousand B/D, year to year, to 203 thousand B/D, compared with levels as high as 270 thousand B/D as recently as November. Residual fuel oil imports fell about 90 thousand B/D to 330 thousand B/D, well below their 400-500 thousand B/D range that has been typical for the past year. Imports of distillate fuel oil, however, rose 20 thousand B/D from a year ago to 210 thousand B/D—but were still down from levels of 240 to 280 thousand B/D of the prior two months.

Refinery Operations

UP FROM A YEAR AGO BUT DOWN FROM PREVIOUS MONTH.

Despite growing 1.2 percent, year to year, during January, input into distillation units fell by a more-than-typical 439 thousand B/D, December to January. Above-trend refinery activity in December was partly responsible for the size of the month-to-month drop. Still, January levels appear to have been down slightly, on a seasonally-adjusted basis, from recent previous months.

As for the composition of refinery output, the shift in emphasis from production of distillate fuels to gasoline, evidenced in the latter half of December, continued during January. This shift had been prompted by moderate winter weather and relatively high distillate inventories. Motor gasoline production rose 5.7 percent, year to year, for the month, while distillate production rose a more moderate 1.0 percent, and jet kerosine production fell 9.5 percent from relatively high levels a year ago. As a result, yields of middle distillates (distillates and jet kerosine) fell to their lowest January level in five years.

Utilization of capacity in operation, at about 86.5 percent, was little changed from that of a year ago, although it was about 1.5 points below the January average for the previous five years. As a percent of reported capacity, the rate is estimated to have been 83.2 percent.

Inventories

DISTILLATE STOCKS APPROACH MORE TYPICAL LEVEL.

Total stocks, which, other things equal, would be expected to stay roughly even during January, dropped a substantial 27 million barrels for the month. However, changes in total inventories in January have typically been among the most volatile of the year. In the previous five years, stocks have fallen during January by as much as 34 million barrels and risen as much as 48 million barrels, the latter due to restocking after an exceptionally cold December in 1989.

Crude stocks, however, with slackening refinery activity, actually rose 7 million barrels during the month, from December's lower-than-typical level of 328 million barrels to 334 million barrels.

Distillate stocks, which in December had been at their highest year-end level in five years, were approaching more common levels by the end of January as a result of the shift away from distillate production at refineries over the past two months. Distillate inventories dropped 16 million barrels, versus an average 6 million barrels in Januarys of recent years. At 127 million barrels, they were 3 million barrels above the recent-year average compared with about a 15 million barrel gap in December.

Gasoline stocks typically rise in January, the result of lower seasonal demand combined with continued refinery activity for meeting winter fuel demand. This January, however, with the ebb in refinery activity from December's level, gasoline stocks rose only about 10 million barrels compared with the recent-year average of about 17 million barrels. Nevertheless, with the inventory builds of the past two months, gasoline stocks still reached 230 million barrels at the end of January, higher than for the last several months but still about 10 million barrels below the recent-year January average.

Crude Oil Production

Total Imports

Input to Distillation Units

Total Inventories

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 569 million barrels as of January 31, 1992).

ESTIMATED UNITED STATES PETROLEUM BALANCE
(Daily Average in Thousands of 42 Gallon barrels)

Products Supplied/Supply From Primary Storage	JANUARY			YEAR-TO-DATE		
	1992/1	1991/2	% Change	1992/3R	1991/2	% Change
Products Supplied:						
Total motor gasoline	6,821	6,643	2.7			
Finished leaded motor gasoline/*	147	281	(47.7)			
Finished unleaded motor gasoline/*	6,674	6,362	4.9			
Naphtha-jet	159	181	(12.2)			
Kerosine-jet	1,412	1,367	3.3			
Distillate fuel oil	3,365	3,356	0.3			
Residual fuel oil	1,201	1,133	6.0			
All other oils/4	4,431	4,371	1.4			
Reclassified/5	-178	-169	5.3			
Total domestic products supplied	17,211	16,882	1.9			
Exports	921	1,199	(23.2)			
Total products supplied	18,132	18,081	0.3			
Supply:						
Domestic production:						
Crude oil/6	7,211	7,364	(2.1)			
Natural gas liquids	1,684	1,635	3.0			
Other supply/7	1,007	837	20.3			
Total domestic supply	9,902	9,836	0.7			
Imports:						
Crude oil, total/8	5,816	5,303	9.7			
Canadian	851	722	17.9			
Other	4,965	4,581	8.4			
Products, total	1,555	1,763	(11.8)			
Residual fuel oil	331	422	(21.6)			
Other	1,224	1,341	(8.7)			
Total imports	7,371	7,066	4.3			
Total supply	17,273	16,902	2.2			
Stock change, all oils	-859	-1,179	******			
Refinery Operations						
Input to crude oil distillation units	13,077	12,928	1.2			
Operable capacity	15,709	15,670	0.2			
Refinery utilization (%)/9	83.2	82.5	0.8			
Crude oil runs	12,883	12,727	1.2			

Stocks (millions bbls.)	1992–1991		1991/2	% Change from	
	Jan. 31/10	Dec. 31/10	Jan. 31	Previous month	Year Ago
Crude oil/8	334.4	327.8	320.1	2.0	4.5
Unfinished oils	100.7	99.4	102.0	1.3	(1.3)
Total motor gasoline/**	229.8	220.1	227.3	4.4	1.1
Finished leaded motor gasoline/*	5.5	5.4	10.0	1.9	(45.0)
Finished unleaded motor gasoline/*	186.6	177.1	177.2	5.4	5.3
Naphtha-jet	4.6	4.7	6.0	(2.1)	(23.3)
Kerosine-jet	40.1	45.0	44.5	(10.9)	(9.9)
Distillate fuel oil	127.2	143.2	112.1	(11.2)	13.5
Residual fuel oil	43.9	48.9	47.6	(10.2)	(7.8)
All other oils	139.4	157.7R	141.4	(11.6)	(1.4)
Total all oils	1,020.1	1,046.8R	1,001.0	(2.6)	1.9

/1 Based on API estimated data converted to a monthly basis.
/2 Source: U.S. Department of Energy.
/3
/4 Includes crude losses.
/5 Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from the total domestic products supplied.
/6 API estimate; includes lease condensate.
/7 Includes Unaccounted-for crude oil, which will reflect withdrawls from the SPR when they occur, processing gain, field production of other hydrocarbons and alcohol.
/8 Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
/9 Represents "Input to crude oil distillation units" as a percent of "Operable capacity".
/10 Derived by interpolating API weekly stocks data.
/R Revised.
/* Included in motor gasoline.
/** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.